

# EUROPEAN PATENT OFFICE

## Patent Abstracts of Japan

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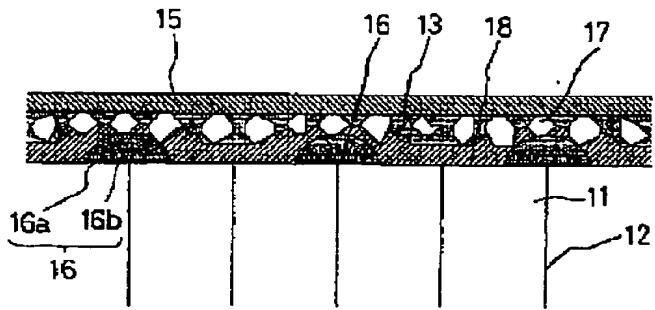
APPLICATION DATE : 07-12-93  
APPLICATION NUMBER : 05306628

APPLICANT : BROTHER IND LTD;

INVENTOR : KOBAYASHI YASUISA;

INT.CL. : H01L 41/083

TITLE : MULTILAYER PIEZOELECTRIC ELEMENT



**ABSTRACT :** PURPOSE: To prevent peeling and imperfect adhesion of conductive protruding parts which are to be generated at the time of cut working and driving of an element, surely connect an inner electrode with an outer electrode, and prevent imperfect conduction and imperfect insulation, by forming conductive protruding parts which are excellent in electrochemical adhesion and have stable shapes.

**CONSTITUTION:** Conductive protruding parts 16 which are electrically connected with a copper foil 15 as an external electrode are formed on the end portions every other inner electrode 12 exposed on an element side surface. The conductive protruding parts 16 are formed by using nonelectrolytic plating layers 16a and electrolytic plating layers 16b formed on the plating layers 16a.

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